

Appl. No. 10/052,741
Atty. Docket No. G-269ML (CP-1228)
Amdu. dated 01/21/2004
Reply to Office Action of 10/21/2003
Customer No. 27752

REMARKS

Application Amendments

Claims 1-6 are pending in the present application. No additional claims fee is believed to be due.

Claims 7-24 have been withdrawn as a result of an earlier restriction requirement, and may be canceled upon notice of allowable subject matter.

No claim amendments have been made.

Rejections Under 35 USC 102(b) and 103(a) Over US Patent No. 5,704,948 to Terranova et al.

Claims 1 and 2 are rejected under 35 USC 102(b) as anticipated by, or alternatively, under 35 USC 103(a) as obvious over, US Patent No. 5,704,948 to Terranova et al. ("Terranova"). The Examiner states that Terranova discloses oxidation bases of Formula (IV) of Terranova in which R13 or R14 may be aminoalkyl of 1 to 4 carbons, and the other R group is hydrogen. The Examiner asserts that Applicants' claimed compound in which Applicants' R1 and R2 are hydrogen would be immediately envisaged by one of ordinary skill in the chemical art in view of Terranova, and, therefore, is anticipated by Terranova. Alternatively, the Examiner asserts that it would have been obvious to make Applicants' compounds because Terranova discloses the use in oxidative hair dye compositions of 4-amino-2-aminomethylphenol, which is a one-carbon homolog of a compound claimed by Applicants. Applicants respectfully traverse the present rejection based on the following comments.

Applicants' claimed compounds are not anticipated by Terranova because one of ordinary skill in the art would not at once envisage Applicants' claimed compounds in view of Terranova. Anticipation under 35 USC 102 requires "the disclosure in the prior art of a thing substantially identical with the claimed invention." *In re Schaumann*, 572 F.2d 312, 317 (CCPA 1978). When a compound is not specifically named, and it is necessary to select values for variable substitutents to interpolate into a generic structural formula to arrive at a particular compound, anticipation can only be found "if the classes [of substituents are] sufficiently limited or well delineated." *Ex parte A*, 1990 Pat. App. LEXIS 19, 17 USPQ2d 1716 (BPAI 1990). Moreover, one may look to "the pattern of [a reference's] specific preferences in connection with [the reference's] generic formula [in order to define what] constitutes a description of a definite and limited class of compounds." *In re Petering*, 301 F.2d 676, 681 (CCPA 1962).

Terranova provides a definite and limited description of para-aminophenols having an aminoalkyl substituent *only* wherein the aminoalkyl substituent is a C₁ aminoalkyl (*i.e.*, aminomethyl) substituent. While R13 or R14 of Formula (IV) of Terranova may be, by broad

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definition, aminoalkyl of 1 to 4 carbons, Terranova fails to disclose any specific aminoalkyl compounds other than 4-amino-2-aminomethylphenol. Similarly, Terranova makes mention of other specific substituted para-aminophenol compounds, but only those having the C₁ respective substituent. See the specific compounds listed at column 5, lines 17-24 of Terranova as compared to the broad definitions of R13 and R14 substituents at column 5, lines 9-16 of Terranova. As a result, Terranova establishes a pattern of a specific preference for substituted para-aminophenols having only the C₁ respective substituents. Therefore, Applicants' claimed compounds requiring C₂ aminoalkyl (*i.e.*, 1-amino-ethyl) substituted at the 2-position of 4-aminophenol would not at once be envisaged by one of ordinary skill in the art in view of Terranova, and, accordingly, are not anticipated by Terranova.

Applicants' claimed compounds also would not have been obvious to one of ordinary skill in the art in view of Terranova. Terranova does not provide adequate suggestion or motivation for one of ordinary skill in the art to modify the compounds disclosed in Terranova or to make a selection from the disclosure of Terranova in order to achieve Applicants' claimed compounds. Terranova is directed to dyeing compositions containing N-substituted 4-hydroxyindole compounds. The compounds of Formula (IV) of Terranova are disclosed among at least five classes of compounds which are suitable for use as oxidation bases in the dyeing composition containing N-substituted 4-hydroxyindole compounds, without any suggestion or preference for Applicants' claimed compounds. Moreover, Terranova teaches that "[t]he nature of the oxidation base(s) which can be used in the dyeing composition according to the invention is not critical." See column 3, lines 40-42 of Terranova (*emphasis added*). Because Terranova teaches that the nature of compounds of Formula (IV) of Terranova is not critical, one of ordinary skill in the art would not be more likely to select Formula (IV) compounds over the other compounds disclosed as suitable oxidation bases, and, even further, would have no motivation to modify the compounds.

Additionally, Applicants' claimed 2-substituted 4-amino-phenol derivative compounds are suitable primary intermediates for hair coloring compositions, providing good oxidative coloration of hair with fastness to light and shampooing. Generally, the art of designing and developing primary dye intermediates for oxidative dyeing of keratinous fibers is highly unpredictable. Compounds which are structurally similar often deliver much different dyeing profiles. Accordingly, with respect to oxidative dye design and development, structural similarity alone does not necessarily lead to similar results. As such, the disclosure in Terranova of the use in oxidative hair dye compositions of 4-amino-2-aminomethylphenol, which is a one-carbon

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homolog of a compound claimed by Applicants, without additional motivation to select and to modify the disclosed compound, does not render Applicants' claimed compounds obvious.

Therefore, it would not have been obvious to one of ordinary skill in the art to make a selection from the disclosure of Terranova or to modify the compounds disclosed in Terranova in order to achieve Applicants' claimed compounds.

Accordingly, Applicants' claims 1 and 2 are novel and unobvious over Terranova.

CONCLUSION

In light of the remarks presented herein, it is requested that the Examiner reconsider and withdraw the present rejections. Early and favorable action in the case is respectfully requested.

Applicants have made an earnest effort to place their application in proper form and to distinguish the invention as now claimed from the applied references. In view of the foregoing, Applicants respectfully request reconsideration of this application and allowance of Claims 1-6.

Respectfully submitted,

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